WHAT IS CLAIMED IS:

An image detector, comprising:

a conductive object detection pattern;

- a light source for illuminating an object on the conductive object detection pattern;
- a sensor for sensing an image of the object;
- a power source selectively supplying power to the light source; and 5
- a controller detecting a current flowing through the conductive object detection 6 pattern, and in response thereto supplying a control signal to the power source to selectively supply power to the light source.
 - The image detector of claim 1 wherein the conductive object detection pattern 2. comprises spaced apart first and second electrodes.
 - The image detector of claim 2 wherein the controller transmits a first electrical signal 3.
 - to the first electrode and receives a second electrical signal from the second electrode and 2
 - detects a conductivity between the first and second electrodes. 3
 - The image detector of claim 1 wherein the conductive object detection pattern is made 4. 1
 - of a material selected from a group consisting of indium tin oxide, tin oxide and TiOx. 2

- The image detector of claim 1 wherein the conductive object detection pattern 5. 1
- comprises spaced apart first and second electrodes, each of the first and second electrodes 2
- having a finger-shaped pattern, fingers of the first and second electrodes being alternately 3
- disposed. 4
- The image detector of claim 1 wherein the conductive object detection pattern 6. 1
- comprises spaced apart first and second electrodes, the first and second electrodes being in 2
- parallel and having a P-shaped pattern. 3
- 1 2 3 1 2 3 The image detector of claim 1 wherein the conductive object detection pattern 7. comprises spaced apart first and second electrodes, the first electrode having a P-shaped pattern and the second electrode being disposed adjacent the first electrode.
 - The image detector of claim 1 wherein the conductive object detection comprises a 8. triangle-shaped pattern, a part of said triangle-shaped pattern being cut so as to form first and second electrodes.
 - The image detector of claim 1 wherein the conductive object detection pattern 9. 1
 - comprises spaced apart first and second electrodes, the first and second electrodes being 2
 - disposed in parallel so as to form a rail-shaped pattern. 3

- The image detector of claim 1 wherein the conductive object detection pattern 1 10.
- comprises spaced apart first and second electrodes, the first electrode having a U-shaped 2
- pattern and the second electrode having an I-shaped pattern. 3
- The image detector of claim 1 wherein the conductive object detection pattern 1 11.
- comprises spaced apart first and second electrodes, the first and second each having a coil-2
- 3 shape pattern.
- The image detector of claim 1 wherein the conductive object detection pattern 12. 1 1 2 3 1 2 3 comprises spaced apart first and second electrodes, the first electrode having spiral-shaped pattern and the second electrode being disposed adjacent to the first electrode.
 - The image detector of claim 1 wherein the controller supplies the control signal to the 13. power source to supply power to the light source in response to a living object residing on the conductive object detection pattern.
 - The image detector of claim 1, wherein the controller receives an electrical signal 1 14.
 - from the power source for providing the current flowing through the conductive object 2
 - detection pattern. 3
 - The image detector of claim 1, wherein the sensor is a thin film transistor optical 1 15.
 - 2 sensor.

The image detector of claim 15, wherein the conductive object detection pattern 1 16. comprises spaced apart first and second electrodes. 2 The image detector of claim 16, wherein the controller transmits a first electrical 1 17. signal to the first electrode and receives a second electrical signal from the second electrode 2 and detects a conductivity between the first and second electrodes. 3 A thin film transistor type optical sensor, comprising: 1 18. a light source for radiating light in accordance with a predetermined signal; 2 3 4 5 6 7 a window for transmitting the light radiated by the light source; a thin film phototransistor for generating an optical current in accordance with an intensity of received light; a storage capacitor for storing charge information produced by the optical current generated by the thin film phototransistor; a switching thin film transistor for outputting the information stored in the storage ¥ 8 $\bar{\mathbb{D}}_{9}$ capacitor in accordance with an external control signal; an insulating layer for covering the window, the thin film phototransistor, the storage 10 capacitor, and the switching thin film transistor; 11 a protecting layer formed on the insulating layer; and 12 a living object detection pattern formed on the protecting layer for supplying an 13 electrical power supply signal to the light source when a living object contacts the living

object detection pattern.

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- 1 19. The thin film transistor type optical sensor of claim 18 wherein the conductive object
- 2 detection pattern is made of a material selected from the group consisting of indium tin oxide,
- 3 tin oxide and TiOx.
- 1 20. The thin film transistor type optical sensor of claim 18 wherein the conductive object
- 2 detection pattern comprises first and second electrodes spaced apart from each other at a
- 3 predetermined distance.